Vatsa Patel

Passionate & Proven Software Systems Engineer | Looking for Summer 2021 Internships

San Francisco Bay Area

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/VatsaPatel

Experience

Software Engineering Intern | 3D RoomSpace

Los Angeles, CA • May 2020 - Aug 2020

- Developed core services for the rental platform to automate leasing, manage listings, deploy contracts on blockchain.
- · Rearchitected and migrated independent services under a scalable Kubernetes environment.

Tech Stack: GCP Cloud run, Kubernetes Engine | Node, GraphQL | React Native, React, Gatsby | DynamoDB

Contractor Software Engineer

San Francisco, CA • May 2020 - Present

- UniversityEats: Building service using Plaid to automatically analyze spendings from all linked banks and set goals.
- PodSource, SF: Helped move to a scalable serverless architecture reducing monthly bills by 72%.
- Built a tool to automatically tag and push docker images to 8 different Container Registries with multiple logins.

Software Engineer | A D Patel Institute of Technology

Learning Management Platform

Part-Time • Aug 2017 - Sept 2018

- Engineered highly-available backend services that are architected to scale even on low-end hardware.
- Deployed an in-house private Cloud cluster using OpenStack that can scale-up or scale-down based on load also providing laaS for other student projects.
- Created a custom network authentication service integrating with internal IAM and auto-assigning bandwidth and QoS based on access level.

Tech Stack: React, React Native, Electron | NodeJS, Golang | MemSQL, HBase, Aerospike.

ADIT Alumni Hub

Part-Time • Aug 2016 - Mar 2018

• Designed & Developed a social platform from scratch to allow Alumni to reconnect with each other, discover other alumni in same region and profession, share jobs & events. Attained 6,400 users within first 3 months.

Tech Stack: NodeJS, PHP | React, JQuery | MySQL, Memcached

Smarq Technologies

Dec 2015 - May 2016

- Ideated a startup at Qualcomm incubator which was selected in the top-10 startup ideas out of thousands of applicants.
- Smarq: tightly-knit ecosystem of smart sensors capable of automation sequences based on local location of user.

Software Developer | Purva Couture

Aug 2015 - Dec 2015

• Single-handedly developed a cloud-based Business Operations system that managed from Sales to Production to Deliveries handling 700+ clients & revenue of \$1M+.

Projects

Feb 2020 - May 2020 **SlackHR**

 Developed a Slack plugin application that helps combat abusive conduct at a workplace backed by a Multi-Label classifier using Neural Network. Currently used at IBM research team's Slack.

Reverse proxy to increase downlink bandwidth

Aug 2019 - Sep 2019

- Developed a reverse proxy that substantially minimizes the effect of Bandwidth Delay Product on TCP Throughput by buffering the file on multiple connections.
- Preliminarily achieved 8x improvement in streaming on intercontinental bandwidth with BBR congestion control.

Federated Learning - Privacy Enhanced Collaborative Machine Learning

Jan 2019 - Aug 2019

- Optimized Federated Averaging Algorithm optimized for Large-Scale LSTM-CNN when the input consists of large number of small-sized updates in Homomorphic Encryption.
- Submitted and got invited to present my research paper in IEEE conference.

Skills

Backend: NodeJS, PHP, Python, Java, C++ Database: SQL: MySQL, Postgres | NoSQL: MongoDB, Redis, DynamoDB

DevOps: AWS, GCP, Docker, Kubernetes, CI/CD, Chef, Kafka, Spark Frontend: React, React-Native, Android

Education

San Jose State University

Jan 2020 - Dec 2021 Expected

Candidate for Masters in Computer Science. Current GPA: 3.85 Dual Specialization: Cloud Computing and Network Programming

Gujarat Technological University

Jul 2015 - Jul 2019

Bachelor of Engineering in Computer Science. GPA: 3.97